

**In the Specification:**

Please enter two paragraphs on page 4, lines 18-21, amended as follows:

**FIG. 5** is a graph of the percent of equilibrated value versus pre-equilibration time in the microrespirometer for a range of evolution rates.

**FIG. 6** is a graph of CO<sub>2</sub> evolution rate ~~versus the rate~~ determined by the microrespirometer versus that determined by an infrared analyzer

Please enter a paragraphs on page 5, lines 16-21, amended as follows:

An alkaline solution **21** is injectable, such as using a syringe **18**, into the reaction chamber **12** via ~~[[a]] the~~ solution-receiving opening ~~48~~ **14**, and a sample **19** is placeable in the sample vial **13**. The alkaline solution absorbs the CO<sub>2</sub> in the headspace **17**. The Indicator in the alkaline solution changes color when the alkaline solution is "consumed" by CO<sub>2</sub>. Preferably the microrespirometer **11** is shaken at a fixed rate (e.g., 240 rpm) on an orbital shaker **20** to enhance CO<sub>2</sub> absorption.

Please enter a paragraphs on page 7, lines 4-10, amended as follows:

The effect of alkaline concentration on the absorption of CO<sub>2</sub> in a closed headspace **17** was investigated at 25°C. A 25-mL sample vial was connected to an ir analyzer so that the vial **13** and the ir detector formed a closed headspace **17** in which air circulated continuously. The 25-mL vial **13** was shaken at 240 ~~[[rpm]]~~ rpm on an orbital shaker **20**. 1-mL portions of 0.2, 0.1, 0.01, and 0.001M were injected into the vial **13** through the solution-receiving opening **18** at the beginning of the experiment, and the concentration of CO<sub>2</sub> in the vial **13** was recorded periodically.

Please enter a paragraphs on page 12, lines 10-20, amended as follows:

A validation experiment was performed by comparing results using the microrespirometer 11 with a method using an ir analyzer such as known in the art (FIG. 6). Portions of soil samples of relatively low CO<sub>2</sub> evolution rates (2–5 µL/h/g), unfrozen processed meat samples of medium CO<sub>2</sub> evolution rates (10–100 µL/h/5 g), and room-temperature milk samples of high CO<sub>2</sub> evolution rates (80–280 µL/h/20 mL) were placed in 25-mL sample vials 13. The CO<sub>2</sub> evolved by microorganisms associated with each sample was determined by the microrespirometer 11 method of the present invention. A duplicate sample in another 25-mL sample vial 12 was also placed in a 250-mL flask, and the CO<sub>2</sub> evolution rate was determined by the ir analyzer method known in the art. The sample vials 12 in the microrespirometers 11 and those in the 250-mL flasks of the ir analysis method were exchanged, and the CO<sub>2</sub> evolution rates determined again with the alternate methods.